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BOOK-REVIEWS.

Petrarch: A Sketch of his Life and Works. By MAY ALDEN WARD. Boston, Roberts Bros. 12°. \$1.25.

A WELL-WRITTEN biography of Petrarch in English is a good book to have; and Miss Ward, we think, has here supplied it. Her work is of moderate dimensions, yet it gives all the information about Petrarch that English readers are likely to need, and it is written in a plain yet easy and flowing style. It recounts the main events of the hero's life, his travels, his many friendships, his multifarious occupations, and his popularity, while at the same time keeping always in view the intellectual work for which posterity honors him. His personal character is made known to us by his letters and other works, and especially by his "Letter to Posterity," which is really an autobiography; and as thus revealed to our view he appears as an extraordinarily active, agreeable, and popular, but somewhat vain man, imbued with an intense passion for antiquity and for the political unification of Italy. Miss Ward, while evincing much admiration for Petrarch's sonnets, thinks, nevertheless, that his real life-work — "one of far more importance and far wider influence than any of his writings, whether Latin or Italian — was the opening of the gates of antiquity to the modern world." This seems to us perfectly just. Sonnets, we apprehend, have little interest for intellectual men at the present day, and will have still less in the years to come; but the men who led the way in reviewing the Greco-Roman civilization can never cease to be important in the history of human progress. That Petrarch was one of the foremost of these as well as one of the earliest, is what gives him his chief claim on our gratitude; and all who are interested in the story of that great awakening will find much pleasant reading and food for reflection in Miss Ward's little book.

AMONG THE PUBLISHERS.

THE observations made at the Blue Hill Meteorological Observatory, and the investigations of the New England Meteorological Society, are now published in the "Annals of the Harvard College Astronomical Observatory." The Blue Hill observations for 1889 include the continuation of the tabular records of previous years, with monthly and annual summaries of hourly values, with an introduction by Mr. Rotch. The record is discussed and published with exceptional fulness. The cloud observations carried on by Mr. Clayton are published in detail, and present a mass of fact from whose reduction we shall expect to see very interesting and novel results. Considering that cloud-movement is much more steady than the movement of surface wind, it is singular that instrumental means, such as are here employed for determining the direction and relative velocity of cloud-drift, have not been more generally introduced. They might at least be introduced at a number of signal-service stations in different parts of the country, in order to test the possibility of their use in storm prediction; for the methods of weather forecasting now in use cannot be regarded as satisfactory. A feature of the Blue Hill station is the relative small and irregular diurnal variation of the various weather elements: even the mean hourly temperature ranged only from 43° to 52.5°. The wind velocity, cloudiness, and rainfall are almost independent of the time of day. All these factors are, however, well known to be dependent closely on the position of passing cyclonic storms; and if referred to these controlling disturbances, instead of to the relatively unimportant changes from day to night, the natural variations of wind, cloud, and rain would undoubtedly stand forth in their true distinctness.

— The "Ninth Annual Report of the Director of the United States Geological Survey" is of somewhat less size than its two-volume predecessor, but is fully up to the average of the earlier seven volumes. Besides the administrative reports of the first two hundred pages, it contains an account of the Charleston earthquake of 1886, by Capt. C. E. Dutton; the geology of Cape Ann, by Professor N. S. Shaler; an explanation of the formation of travertine and silicious sinter in the hot-springs of the Yellowstone National Park, by W. H. Weed; and an essay on the geology and physiography of parts of Colorado, Utah, and

Wyoming, by Dr. C. A. White. Capt. Dutton's report is full of interest. The accounts of the earthquake and its effects, as presented in his memoir, will at once become the standard classic for this country, and the illustrations of damaged buildings will furnish material for all the new geographies and geologies for many years to come. The depth of the earthquake focus is placed at twelve miles, with a probable error of two miles. The velocity of the wave is determined to be about three miles a second, decidedly greater than has been found in other shocks; but, as the determination is based on good observations, the author is disposed to give it great weight, and to discard earlier results. Mr. Weed's essay on the travertine and silicious deposits of the hot-springs of the Yellowstone Park brings to light a process heretofore little suspected. The terraced formations of the springs are found to have been formed in great part by the agency of a low form of algaous vegetation. He concludes that the plant life of the Mammoth Hot Springs causes the deposition of travertine, and is a very important agent in the formation of such deposits; that the vegetation of the hot alkaline waters of the geyser basins eliminates silica from the water by its vital growth, and produces deposits of silicious sinter; and that the thickness and extent of such deposits prove the importance of such vegetation as a geological agent.

— John Wiley, one of the oldest publishers in the United States, and well known among scientific men as the founder and head of the publishing-house of John Wiley & Sons, which has brought out so many engineering and scientific books in this country, died at his home in East Orange, Feb. 21. Mr. Wiley was born in Flatbush, L.I., Oct. 4, 1808, but his parents removed shortly after to New York. At seventeen he entered his father's store, the firm then being Wiley, Lane, & Co. Later, upon the death of his father, he succeeded to the business, G. P. Putnam being his partner at the time. Charles Wiley, his son, was admitted to the firm about forty years ago; and later William H. Wiley, well known among engineers, was also admitted, the firm name being changed to John Wiley & Sons. For nearly fifty years the office was in the old Mercantile Library building, recently demolished. Mr. Wiley was married in 1833 to Elizabeth S. Osgood. They had five children, — three sons and two daughters. Mr. Wiley was one of the original founders of the Church of the Puritans, this city, of which the Rev. Dr. Cheever was the pastor for so many years. He was an active member of the American Home Missionary Society, and for many years its president. He was also an active member of the Congregational Union of New York. He removed to East Orange in 1851.

— G. P. Putnam's Sons have in preparation "The Life and Writings of George Mason of Virginia," in the Early Statesmen Series; "Chapters on Banking," by Professor Dunbar of Harvard, and "The Industrial and Commercial Supremacy of England," by the late Thorold Rogers, in the Economic Monographs; and "Drinking-Water and Ice-Supplies," in Dr. Prudden's Health Manuals.

— The long-delayed Monograph I. of the Geological Survey on Lake Bonneville, an extinct lake of the Utah basin, by G. K. Gilbert, is at last published. The general character of the history of this ancient lake was given by the same author a number of years ago in the "Second Annual Report" of the survey; and in a later report there was an essay by him on the topographic features of lake shores, now reprinted, with little change, as constituting an element in the discussion of the Utah basin. As now presented, the entire essay is a model of elaborate and deliberate discussion. Taking the present monograph with the one on Lahontan by Russell, who was associated with Gilbert in the study of the Great Basin, it may be safely said that no other area of interior drainage in the world has received so complete an examination, nor has yielded results of such wide importance. The sensitiveness of interior lakes to variations in the relation of rainfall to evaporation renders them of the highest value as indicators of climatic changes in the past. With this point in mind, the interpretation of their deposits discloses the existence of two moist periods, with an interval of dryness; and these are correlated with the two glacial and the single interglacial epoch, not only by

inference, but by the direct association of morainic deposits with the lake beds. The volcanic manifestations during and after the existence of the lakes, and the faults occurring in the shore deposits, add interesting complications to this remarkable region.

— Professor J. C. Smock, lately appointed chief of the New Jersey Geological Survey, where he some time ago served as assistant under the late director, Professor Cook, has prepared a report on the building-stones of New York, issued in the second volume of the bulletins of the University of the State of New York, where Professor Smock has been engaged as economic geologist of the State Museum for several years past. Reference is made to previous works of the kind, such as Julien's "Report on the Building-Stones of New York" in the Tenth Census, Merrill's "Building and Ornamental Stones in the United States National Museum," the author's quarry list in a previous bulletin, and others. The bulletin contains an introductory statement of the classification adopted: namely, crystalline rocks, embracing granites and gneisses, trap rocks, and limestones and marbles; second, fragmental rocks, including sandstones, conglomerates, and slates. The limestones and sandstones are further arranged according to the geological formations from which they are obtained. A hundred pages are then given to a recital of the localities of quarries throughout the State. The uses, tests, and durability of the different kinds of stones occupy as many more pages. Under the first of these headings, we find a list of stones used in the more

important buildings all over the State. A map is given at the end of the volume, with the names of quarry districts underlined in red.

— The first geological survey of Ohio was undertaken in 1836, and continued for two years. The work then lapsed until 1869, when it was begun again with greater vigor, Professor Newberry being in charge; and under his direction and that of his successor, Professor Edward Orton, numerous reports were issued down to 1888. Owing to the reckless and irregular method of distributing these volumes, complete sets are not often found, although editions of 20,000 of certain volumes were printed. In 1889 a third organization of the survey was made, and it is now regarded as a continuous official department of the State. Professor Orton is still in charge. The first annual report under these new conditions is just issued. It gives a brief review of the previous surveys, from which the above notes are taken; a general sketch of the results of the previous surveys, with corrections of certain earlier statements in the light of recent explorations; and a large amount of material concerning the natural gas and oil, which have attracted so much attention during the past six years. The extraordinary abundance of the natural gas is only equalled by the reckless manner in which it has been wasted. It is already decreasing, and, in Professor Orton's opinion, should be reserved chiefly for domestic uses. An excellent review of the theories accounting for the occurrence of oil and gas is given. This report

Publications received at Editor's Office,
Feb. 16-21.

- ALUMINUM Age. Vol. I. No. 1. m. Newport, Ky.
C. L. Hartsfeld. 8 p. f. 25 cents per year.
CALL, Annie Payson. Power Through Repose. Boston, Roberts. 169 p. 16°. \$1.
COTTERILL, J. H., and SLADE, J. H. Lessons in Applied Mechanics. London and New York, Macmillan. 512 p. 16°. \$1.25.
COUES, E. "A Woman in the Case" ("The Biogen Series," No. 6). Boston, Occult Publ. Co. 54 p. 24°.
GRAHAM, R. H. Geometry of Position. London and New York, Macmillan. 192 p. 12°. \$1.75.
GREENOUGH, J. B., ed. Livy. Books I. and II. Boston, Ginn. 270 p. 12°. \$1.35.
LINCOLN, D. F. Hygienic Physiology. Boston, Ginn. 206 p. 12°. 90 cents.
MASON, L. W., and VEAZIE, G. A., jun. The New Fourth Music Reader. Boston, Ginn. 282 p. 8°. \$1.05.
RECLUS, E. Primitive Folk. Studies in Comparative Ethnology. New York, Scribner & Welford. 339 p. 12°. \$1.25.
SHOEMAKER, J. V. Heredity, Health and Personal Beauty. Philadelphia and London, F. A. Davis. 422 p. 8°. \$2.50.
WARD, May Alden. Petrarch: a Sketch of his Life and Works. Boston, Roberts. 293 p. 12°. \$1.25.
YOUNG, C. A. Lessons in Astronomy. Boston, Ginn. 357 p. 12°. \$1.30.

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is distributed gratis by the members of the General Assembly of Ohio, but, if any one wishes, he may buy it for fifty cents.

— The "Investigations of the New England Meteorological Society" for 1889, includes, besides the usual tabular summaries, three essays on "Weather-Types in New England," "The Sea-Breeze on the New England Coast," as observed in 1887, and the "Characteristics of the New England Climate." The greater part of these are contributed by the director, Professor W. M. Davis of Harvard College, and Professor W. Upton of Brown University. The essay on weather types opens a line of writing that might be taken up to advantage in other State weather services, where some addition to the monotony of the annual tabular reports would be refreshing. The study of the sea-breeze is based on the reports of about a hundred volunteer observers on and near the eastern coast of Massachusetts, from Newburyport to Plymouth. The irregularity of the occurrence of the breeze is so great that it does not appear a hopeful subject for further study. Professor Upton

summarizes the climate of New England under the following headings: changeable and unsettled weather; great ranges of temperature, both daily and annual; variation of seasons from year to year; equable distribution of temperature; and variety of local features from the low southern coast to the mountainous northern interior.

— In *Lippincott's Magazine* for March, 1891, the first instalment of "Some Familiar Letters by Horace Greeley" form an interesting feature. This is a series of letters written by Horace Greeley to an intimate friend, and covers the period immediately preceding and during his political campaign. These letters are expected to remove many unfounded prejudices. Another of the series of "Round-Robin Talks" appears in this number. Among the guests are Paul B. Du Chaillu, George W. Childs, T. P. Gill, M.P., George Parsons Lathrop, Julian Hawthorne, and others. The *pièce de résistance* of this instalment is the story told by Paul Du Chaillu of his discovery of the gorilla in the wilds of Africa.

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